



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
ROCKVILLE
Machine Id
JOHN DEERE 350G M08-0875 1FF350GXCGF811198
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0165555	JR0125502	JRMC436295
Sample Date		Client Info		15 Jul 2023	03 Nov 2022	16 Apr 2019
Machine Age	hrs	Client Info		6725	5597	2779
Oil Age	hrs	Client Info		0	400	500
Filter Age	hrs	Client Info		0	400	500
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	SEVERE	NORMAL

WEAR

Valve wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	49	42	38
Chromium	ppm	ASTM D5185m	>11	2	1	1
Nickel	ppm	ASTM D5185m	>5	▲ 13	0	2
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	2	2	8
Lead	ppm	ASTM D5185m	>26	0	<1	<1
Copper	ppm	ASTM D5185m	>26	2	1	18
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

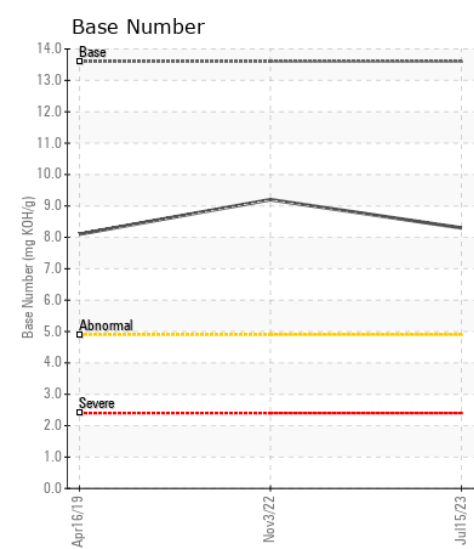
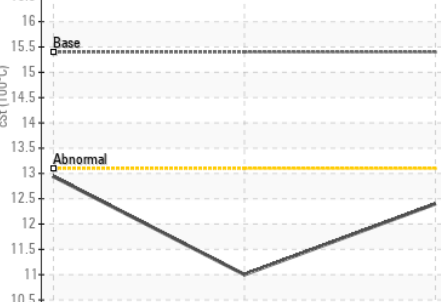
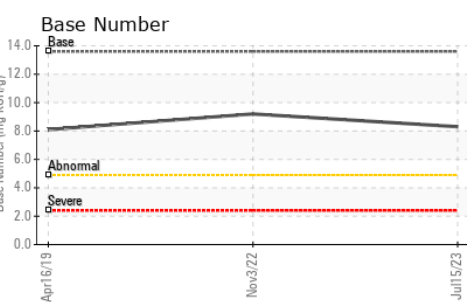
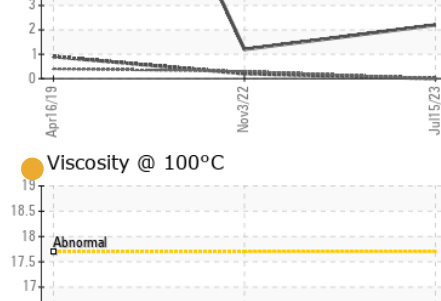
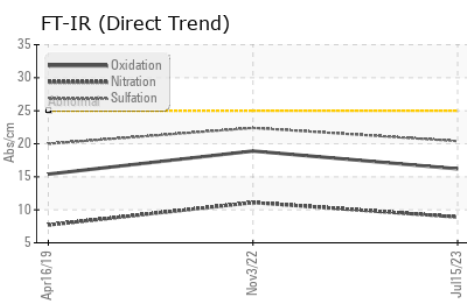
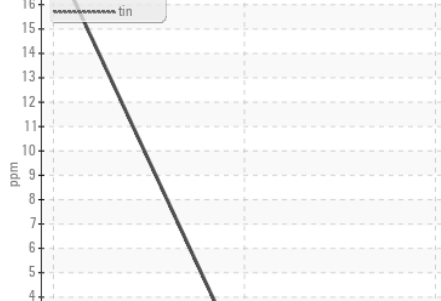
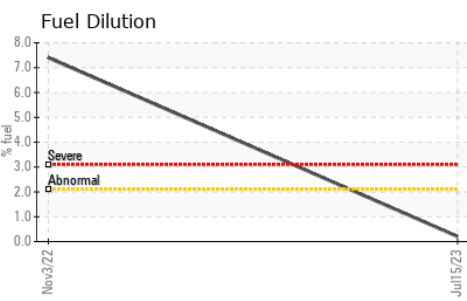
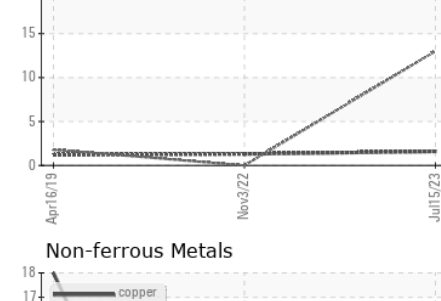
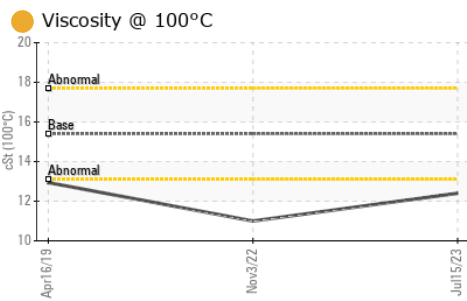
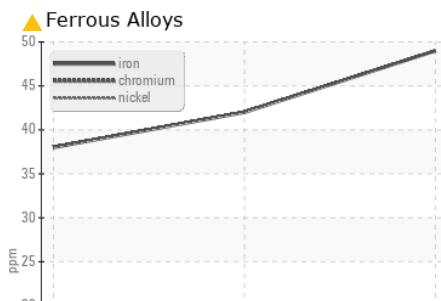
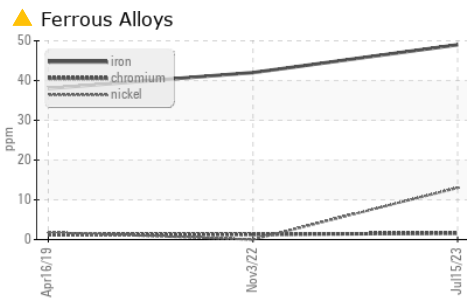
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	4	5	5
Potassium	ppm	ASTM D5185m	>20	<1	2	1
Fuel	%	ASTM D3524	>2.1	0.2	▲ 7.4	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.9	11.1	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	22.4	20
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	4	0	3
Boron	ppm	ASTM D5185m		33	43	17
Barium	ppm	ASTM D5185m		0	2	<1
Molybdenum	ppm	ASTM D5185m		97	60	320
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		1080	904	1058
Calcium	ppm	ASTM D5185m		1153	944	1133
Phosphorus	ppm	ASTM D5185m		1017	917	1181
Zinc	ppm	ASTM D5185m		1309	1101	1247
Sulfur	ppm	ASTM D5185m		3770	3223	3191
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	18.9	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.3	9.2	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	● 12.4	▲ 11.0	12.94



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0165555 **Received** : 18 Jul 2023
Lab Number : 05901090 **Tested** : 19 Jul 2023
Unique Number : 10562446 **Diagnosed** : 19 Jul 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PercentFuel, TBN)
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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